stroyed for want of such provision, was the cause of my introduction to the professor.—I am, Sir, &c. X.

London, 8th August, 1846.

*** On more than one occasion we have pointed out the necessity of this provision.

FOREIGN ARCHITECTURAL AND COLLATERAL INTELLIGENCE.

The Modern Memphis.—Whatever the *National* or similar papers may *tell* us, the artistic, the structural activity of Paris must be now of an extraordinary kind. The Quai d'Orsai has presented, of late, the appearance which those wharfs of the cities of the Nile must have had in the times of the Pharaohs, as cargoes of white (Carrara) marble, granite, and other rocks, are constantly pouring in, and are carried off to all parts of the metropolis. Most of these immense blocks and slabs are destined for the tomb of the Emperor, the palace of the President of the Lower House, and that of the Secretary of Foreign Affairs. These three monuments alone afford employment to eight hundred workmen.

The column of the Place du Châtelet is to be restored. This structure, which possesses some character of elegance, was the first which was erected to the memory of the armies of the Republic and the empire, at the beginning of the present century. At that time this square was encumbered by old houses, which have since been all demolished.

At the four angles of the Pont de la Concorde, the foundations of four pavilion-pedestals have been just laid, all in hewn blocks of stone. They will be adorned by the colossal statues of Commerce, Industry, Agriculture, and Navigation.—The restoration of the great hall of the Court of Commerce has been completed, and the sittings opened in this magnificent locale.

The First Atmospheric Railway in France.—A cargo of enormous cast-iron tubes has arrived at the Quai des Célestines. They have been made at the forges of Vandeuvre (Aube), and are destined for the atmospheric railway of St. Germain.

Hydraulic Works in France.—The Chambers have this year allowed large sums for these works, which are about to be carried into effect. For the regulation of the Seine at Paris five millions of francs, for that between Paris and Rouen ten millions, and thence to the sea three millions more; altogether twenty-six millions of francs are available. In the last section, one of those difficulties arising from the meeting of salt and fresh water, viz., a sandbank (*travérse*) of twenty kilometres extent, is to be coped with. If the Seine is flooded by rains, the bank is pushed *downwards* from Quillebouef towards Havre, while the spring tides will make it *recede* backwards, and it will extend, at low water, as far as Villequieux. Vessels drawing three metres of water cannot pass it but during spring tides, six or seven days each month; and even coasting crafts are often unable to pass. It was especially Mr. *Arago*, who contributed by his arguments to convince of the possibility of removing this great obstacle to navigation. He drew an analogy between the *embouchure* of the Seine, and that of the Ganges and Amazon rivers, and contended, that if the bed of the former river were narrowed by extensive dykes, and thus compelled to flow in a narrower channel, its current would become more rapid, and an immense *power* created, which would constantly contribute towards clearing the passage.—The great irrigation plans in the Pyrenees are next to be adverted to. The *Neste* is one of the small confluents of the Garonne, which, however, during the summer, is much swelled by the melting of snow. These waters are to be collected in large *reservoirs*, the cost of which is calculated at six millions of francs. Thereby, however, 50,000 hectares of land would be irrigated, and the superfluous water employed in feeding a canal between Mathory and Toulouse.

Steam Navigation of the Orinoco.—A late diplomatic agent of the United States at Carracas, Mr. Vespasian Ellis, has obtained from the Colombian government a patent for the exclusive navigation by steam of the above river during the space of twenty-two years. The timber of construction, as well as the fuel, will be furnished to him gratuitously from the public forests. His boats, moreover, will be exempt from any sort of taxation. Mr. Ellis, however, is obliged to commence operations within the next ensuing eighteen months. (Such a privilege amounts to the granting of a fortune).

New wagon, "a pivot."—Some experiments have been made at Lormont, in France, of a new wagon, invented by Mr. Boscaud, contractor of railways. It presents the advantage that it can be loaded and unloaded from all sides without the necessity of shifting it. It is chiefly destined for carrying *débris*, and other bulky and heavy materials.

Legitimate Enterprize and Speculation.—The French journals say, very properly, that it is a worthy purpose and a great thing to *divert* the owners of small capital (especially the tradesmen) from the gambling and futile speculations of the stock-exchange, and make them embark in sound, straightforward, and *tangible* enterprise. These remarks are made especially to bear on the *nautical gymnasium, and winter gardens,** in the course of being established at Paris,—an undertaking for the people, and (as it seems) by means of the people, whose shares are now (after only four months after their issue) at a premium of 19½ per cent.

The Streets of Paris—have been placarded over, of late, by the republication of an order of the Préfet de Police, enjoining the inhabitants to water the paving before their houses *twice a day*—at 11 A.M., and 3 P.M. As every moderate irrigation absorbs a great deal of caloric, and depresses the temperature, such a procedure is not only one of convenience, but of real *sanatory* importance. J. L—y.

RAILWAY JOTTINGS.

The passenger-fares on those lines of railway in which Mr. Hudson is more particularly interested, are pointed out by a "Man of the Midland Counties," in the *Times*, not only to be precisely those of which the public are presented with no clear tables, being, on the contrary, left suspiciously in the dark; but to be precisely those, as might be thus suspected, which drain the purse of the public to the heaviest amount. This "Man of the Midland Counties" has been at the trouble of searching out and laying before the public, tables of these and other fares, from which exposure the ruling principle of the Hudsonian lines appears in a very palpable, and by no means amiable light. From these tables we have taken the averages, and find that, while on all the other lines the average 1st class fare, for every 100 miles, is 18s. 9½d.; 2nd class, 13s. 7½d.; 3rd class, 8s. 9½d.;—on the Hudsonian, the 1st class averages 24s. 7d.; the 2nd, 16s. 6d.; and the 3rd, 13s. 4d.; there being only one of these latter lines, out of five, on which there is any third class at all; while on every one of the eleven other lines there is a third class, with fares so low, in eight cases, as 7s. up to 8s. 8d. per 100 miles. In one instance (the Great North of England) it appears that the charge is at the rate of 1/. 9d. per 100 miles for 2nd class passengers, while the London and Birmingham charge only 16s. 6d. for passengers of the 1st class!——The London booksellers and stationers have petitioned the legislature against certain clauses in several railway bills now before Parliament, authorising the opening of parcels carried on the lines projected, and the charging of separate carriage for each inclosure.——In the course of Mr. Stephenson's examination before the select committee of the Commons, on railways, some curious details were elicited respecting the Parliamentary expenses attending the passing of railway bills. From these it appears that such expenses alone amount to from 500*l.* to 1,000*l.* per mile, varying according to the amount of opposition; while in Belgium, on the other hand, there are no parliamentary expenses at all, excepting what are paid by the government, and which do not amount to more than 2,000*l.* to 3,000*l.* altogether, for each bill. Mr. Stephenson also states that, taking the annual income of the London and Birmingham line at about 800,000*l.*, one-half of that sum is spent in labour and materials, but chiefly (that is, probably, 300,000*l.*) in labour, from that of the secretary, of course, down to that of the common porter, and that if labour could be had at the same rate as in Belgium, the company would be enabled to lower even their present moderate fares to the extent of 150,000*l.* a year.——The writer of some remarks on the subject of "winding up" railways, quoted in the *Times* as worthy of attention, asks what check a scripholder has on the expense of schemes in process of winding up previous to the passing of the "dissolution Act." Considering "the enormity in the charges of too many of these companies," he suggests that "there ought to be a power of taxing surveyors' and engineers', as well as solicitors' bills; and of making directors refund many choice pickings they have had at shareholders' expense."——M. Cornu, of Paris, proposes to remedy the twisting and warping of rails, rolled in the ordinary manner, by using only one single piece of perfectly rolled iron with a tongue of the same metal, and then passing them through properly shaped rollers.——The lightning has been at work on the line of electric telegraph between London and Portsmouth, and has put a stop to its operations for the present. At Farnham the lightning communicated through the wires a shock so powerful as to throw down one of the supports on the line; and at Gosport the dial has been deranged in its mechanism by the electric fluid, and rendered useless.——As had been foreseen, some difficulties have occurred in the working of the Stoke-hill tunnel, and the Stowmarket embankment, on the Ipswich and Bury St. Edmund's line of railway. The public road above the tunnel lately subsided at one part, and the bore of the tunnel was choked up with earth. A chasm on the surface, 80 feet wide and 9 feet deep, rendered the road impassable; but the damage, both to the tunnel and the road, has been repaired—at least the former, and a little time will complete the latter repair. The embankment north of Stowmarket subsides almost as quickly as it is formed, but the length of the line across the Morass is not great, and the embankment is not above six feet high.——The Wren embankment, on the Lancaster and Carlisle line, near Carlisle, is said to be from 70 to 80 feet in height. There have been repeated slippings on this embankment also, and it is still in an unsatisfactory state, although it has lately been upheld by a substantial wooden frame-work. The still more secure fixing of this frame-work, previous to the opening, has been recommended to the consideration of the directors.——A royal commission is to be appointed to fix the site of a central railway terminus in Glasgow, so soon as the concurrence of the citizens is obtained.——The *Edinburgh Register* presents the following as a correct list of the number of labourers employed on the different railways now in course of formation within the limits of the county:—On the Hawick branch of the North British line, 3,325; of whom upwards of 1,300 are Scotchmen, 1,000 Irishmen, and only about twenty Englishmen. On the Caledonian line, 649; of whom there are 300 Scotchmen, the same number of Irishmen, and only about thirty Englishmen.——The *Journal de la Somme* states, that the tunnel of Port Noyon, on the Boulogne line, has been examined since the accident of the 18th ult., and although no damage could be traced as the cause of the crash heard on that occasion, it has been resolved that the head of the tunnel shall be entirely rebuilt, and the brick vault strengthened with bands of stone.——The *Journal des Débats* assures us, that the Pope has asked of the French government, and obtained, copies of all the laws and statutes anent railways; his holiness being anxious to establish throughout his dominions a complete network of railways.

* Vide page 338, ante.

Destructive Fires.—At Nantucket, in America, lately 180 buildings are said to have been destroyed by fire. The loss is at present incalculable, but there is no explicit intimation of the loss of life in consequence. In order to arrest the flames, it is said that twenty houses were blown up by gunpowder, the whole stock of that material in the town having been thus exhausted. Property to the estimated amount of 30,000*l.* has also been destroyed by fire at the Mauritius.

The Rebuilding of St. John's, Newfoundland.—An act has passed the legislature of Newfoundland for raising the sum of 250,000*l.*, to be appropriated to the rebuilding and improvement of the town of St. John.

For a comprehensive guide to PDF Compression and OCR go to our website